

painted in 1880, he shows how the Sun may be painted the right size (usually it is grossly exaggerated in pictures) and yet produce the right effect on the casual observer. He made a sketch of the great comet of 1882, which was reproduced in the *Monthly Notices* (vol. xliii, page 288); and a "rough drawing of *Copernicus*," made with the Matthew Equatorial in 1876, forms the frontispiece to vol. i. of the *Observatory*. H. H. T.

ROBERT CROWE was born at Middleton, in the Yorkshire Wolds, on the 19th of December 1820. He obtained the degree of Master of Arts at Trinity College, Dublin, and shortly afterwards took Holy Orders. For 47 years, from 1851 to 1898, he was Vicar of Woodhouse, near Huddersfield. He made his own telescopes and was a regular observer of the planets. He became a Fellow of the Society in 1869.

He married a daughter of the Rev. C. Drawbridge, a former vicar of Honley, near Huddersfield. They had no children. He died at Woodhouse Vicarage on the 9th of November 1901.

ALFRED WILLIAM DRAYSON was born at Waltham Abbey, Essex, in 1827. He received his education at the Royal Military Academy, Woolwich, and obtained his first commission in 1846. He served in the Kaffir war in 1847, and against the insurgent Boers in 1848. In both campaigns his knowledge of the Kaffir and Zulu languages were of great service. He was appointed instructor in surveying and field works at the Royal Military Academy, Woolwich, and shortly afterwards professor of surveying and practical astronomy. During this period he was instructor to the Duke of Connaught. On returning to military duty he was appointed to command the Royal Artillery at Portsmouth. In 1876 he proceeded to India in command of his brigade, and did valuable work in the rearment of various forts in Bengal. Upon returning to England he was promoted to the rank of General. He retired from the army in 1883, and lived at Southsea till his death on the 27th of September 1901.

General Drayson wrote a number of stories, beginning in 1858 with *Sporting Scenes among the Caffres*, and following with *Among the Zulus*, *The Gentleman Cadet*, and many others. He published books on billiards and whist, on both of which games he was an authority.

As a military writer mention may be made of his work on military surveying, which had several editions and was used as a text-book.

In his astronomical writings General Drayson went somewhat astray. In one of these he attributed what were really errors of observation to a gradual increase of the Earth's diameter; and in another he substituted a geometrical movement of the pole (which more or less accounted for the phenomena of recent years, but which was entirely empirical) for the orthodox precession,

nutation, and change in inclination of ecliptic to equator, which have a dynamical basis.

General Drayson was of a kindly disposition and made many friends. He passed a long life in great activity and rendered valuable services to his country.

He was elected a Fellow of the Society on the 10th of January 1868.

JOHN PENN HARTREE was born at Lewisham on the 14th of November 1844, and died at his residence at Cambridge on the 3rd of May 1901. He entered at Trinity College, Cambridge, in 1863, and obtained a first class in the Natural Science Tripos in 1865. After taking the degrees of M.A. and M.B. he practised for some years as a doctor, but retired from practice in 1875. His practical interest in astronomy began in 1876 and continued till 1896; he possessed a 6-inch Cooke equatorial, a small transit by Troughton and Simms, and an astronomical clock. He was elected a Fellow of the Society in 1879, but never communicated any papers. He married in April 1868 Janet, eldest daughter of Samuel Smiles, LL.D.; his wife died in 1899. They leave two sons, a daughter having died in childhood.

LORD INVERCLYDE, better known perhaps as Sir John Burns, was born in Glasgow in 1829. He was the eldest son of Sir George Burns, Bart., of Wemyss Bay, and Jane, daughter of James Cleland, LL.D., of Glasgow. He was educated at Glasgow University, and immediately after leaving college was associated with his father in the business of the Cunard Steamship Company.

On the retirement of the original partners he became head of the company, and its present great position has been attained through his foresight and enterprise. In addition to the great development of the Cunard Line he greatly improved the mail service between Scotland and Ireland by his fine fleet of Royal steamers which ply between those countries.

Lord Inverclyde rendered great service to the country by drawing the attention of the Government to the methods by which merchant ships could be adapted for war purposes, and by the leading part he took in connection with the defences of the Clyde when the Government took up the question of coast defence.

He took deep interest in religious and philanthropic work in Glasgow, and was President of the Clyde Industrial training-ship *Empress*, and of the Glasgow Foundry Boys' Religious Society. He died at Castle Wemyss on the 12th of February 1901. He was elected a Fellow of the Society on the 13th of November 1874.

WILLIAM LETHBRIDGE was born on the 20th of February 1825 at Tavistock. He was a schoolfellow of the Right Hon.